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(12) **United States Design Patent** (10) **Patent No.:** **US D835,417 S**
Butz (45) **Date of Patent:** **** Dec. 11, 2018**

(54) **INTERDENTAL CLEANER**
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(72) Inventor: **Jürgen Butz**, Schonau (DE)
(73) Assignee: **SUNSTAR SUISSE S.A.**, Etoy (CH)
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(52) **U.S. Cl.**
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132/329; D28/65, 68
CPC A46B 9/02; A46B 1/00; A46B 9/06; A46B
7/04; A61C 3/005; A61C 15/02
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
4,828,420 A * 5/1989 Otsuka A46B 7/04
132/329
D319,148 S * 8/1991 Emily D4/104
D377,121 S * 1/1997 Lee D4/111

D385,964 S * 11/1997 Mark D24/176
6,499,174 B2 * 12/2002 Henrie A46B 9/02
15/106
D482,532 S * 11/2003 Masini D4/111
D489,535 S * 5/2004 Dragan D24/119
D505,790 S * 6/2005 Kline D4/111
D521,737 S * 5/2006 Siemer D28/65
D536,529 S * 2/2007 Antler D4/111
D571,043 S * 6/2008 Crossman D28/65
D575,004 S * 8/2008 Jansheski D28/65
D576,799 S * 9/2008 Vezin D4/111
D609,012 S * 2/2010 Chu D4/106
D640,833 S * 6/2011 Kang D28/68
D674,610 S * 1/2013 Eatherton D4/111
8,584,301 B2 * 11/2013 Maissami A61C 3/005
15/167.1
D703,955 S * 5/2014 Nanda D4/104
D721,851 S * 1/2015 Huang D28/65
D744,756 S * 12/2015 Kato D4/104

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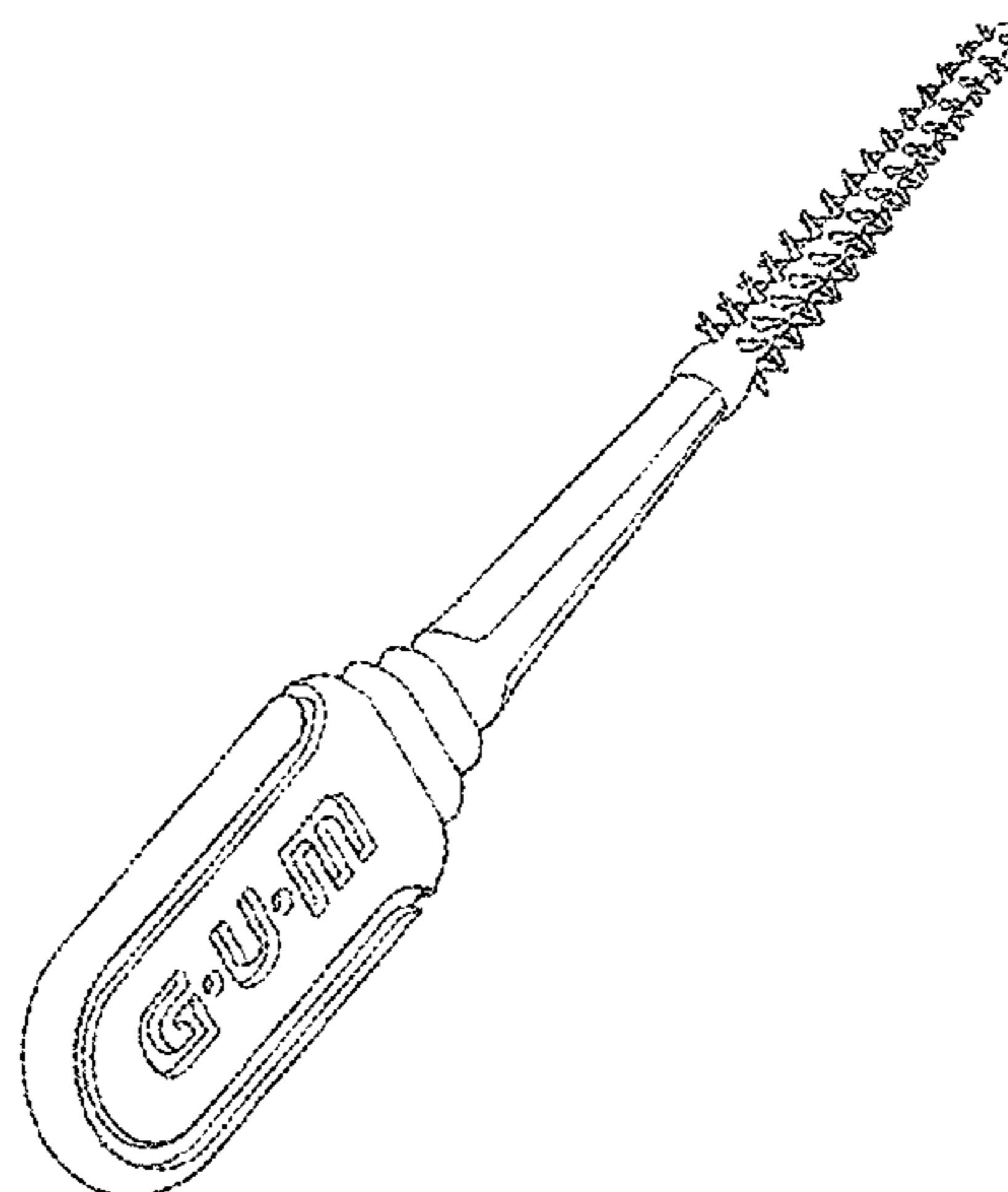
Primary Examiner — Rhea Shields
(74) *Attorney, Agent, or Firm* — McGlew and Tuttle, P.C.

(57) **CLAIM**
The ornamental design for an interdental cleaner, as shown and described.

DESCRIPTION

1.1 is a perspective view;
1.2 is a front view;
1.3 is a back view;
1.4 is a top view;
1.5 is a bottom view;
1.6 is a left view; and
1.7 is a right view.
2.1 is a perspective view;
2.2 is a front view;
2.3 is a back view;
2.4 is a top view;
2.5 is a bottom view;
2.6 is a left view; and
2.7 is a right view.

1 Claim, 14 Drawing Sheets



(56)

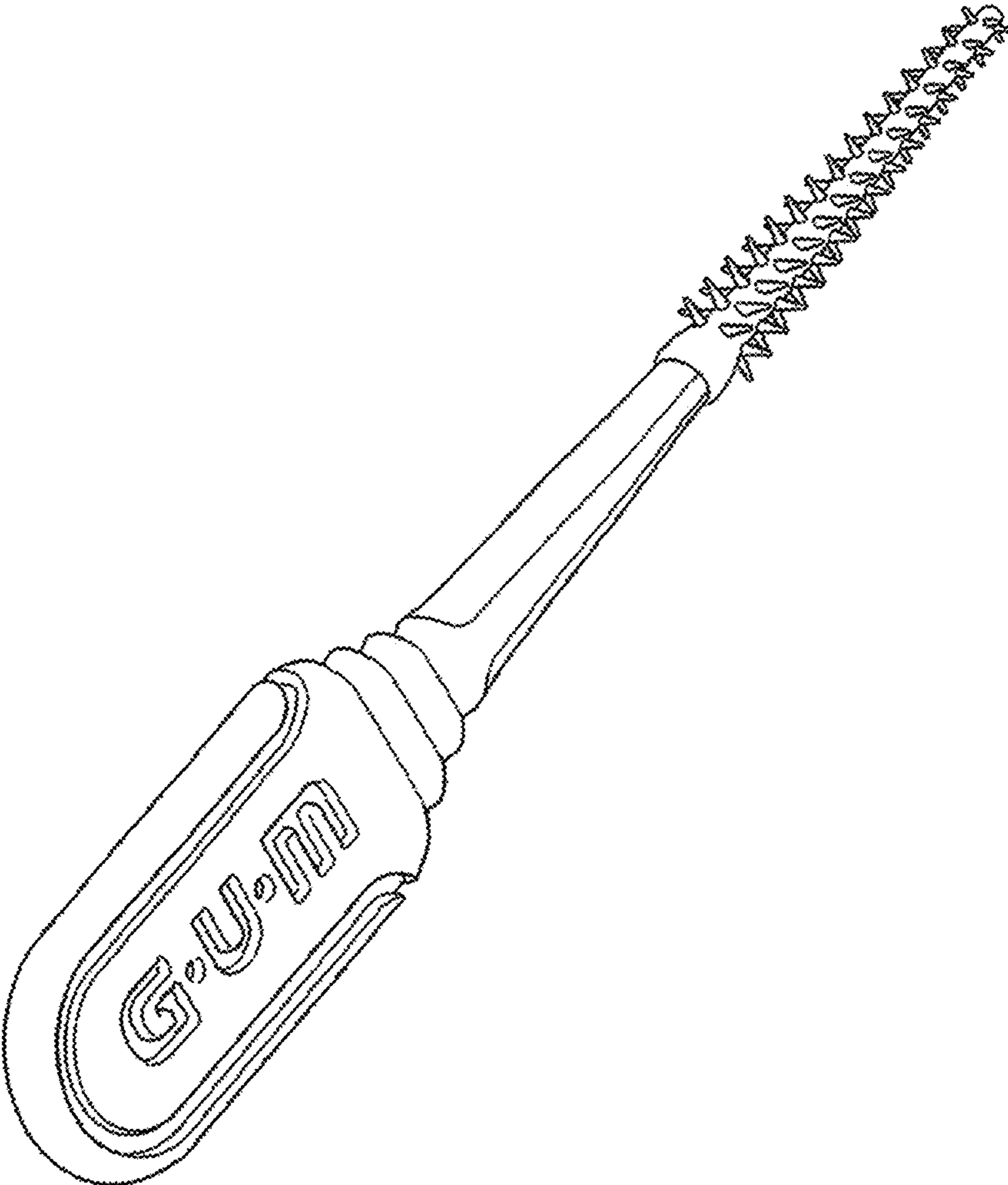
References Cited

U.S. PATENT DOCUMENTS

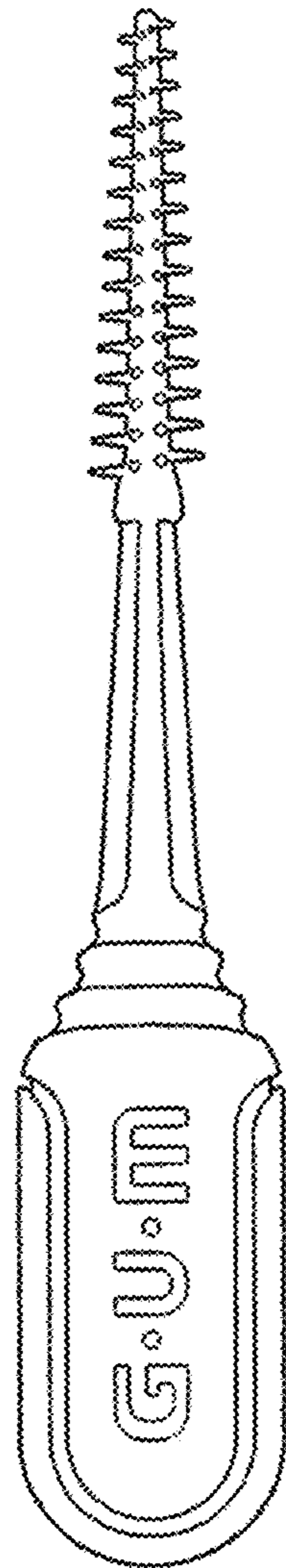
D756,125 S * 5/2016 Hsu D4/111
D757,440 S * 5/2016 Butz D4/111
D763,578 S * 8/2016 Kato D4/111
D765,988 S * 9/2016 Kato D4/111
D767,900 S * 10/2016 Kalbfeld D4/111
D772,578 S * 11/2016 Isaacs D28/68
D775,765 S * 1/2017 Schmidt D28/65
D777,443 S * 1/2017 Xu D4/101
D777,920 S * 1/2017 Xu D24/152
D782,825 S * 4/2017 Hohlbein D4/111
D787,128 S * 5/2017 Butz D28/65
D788,304 S * 5/2017 Kikkawa D24/152
D788,305 S * 5/2017 Kikkawa D24/152
D794,793 S * 8/2017 Butz D24/152
D795,430 S * 8/2017 Butz D24/152
D798,602 S * 10/2017 Perry D4/107
D798,606 S * 10/2017 Kim D4/137
D802,137 S * 11/2017 Butz D24/152
D809,303 S * 2/2018 Kikkawa D4/111
D809,304 S * 2/2018 Tsukamoto D4/135
D812,912 S * 3/2018 Eidenbenz D4/111
2015/0282601 A1 * 10/2015 Butz A46B 1/00
15/167.1
2017/0318948 A1 * 11/2017 Butz A46B 9/06
2017/0319310 A1 * 11/2017 Gengyo A61C 15/02

* cited by examiner

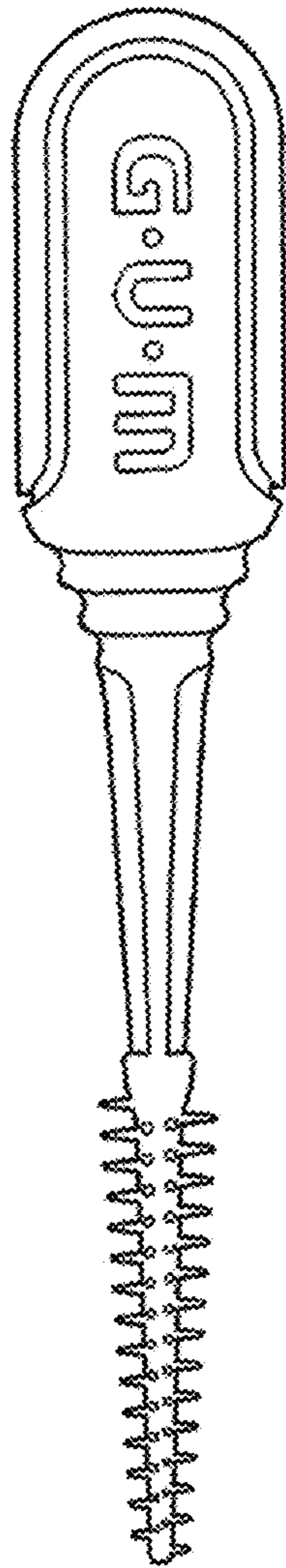
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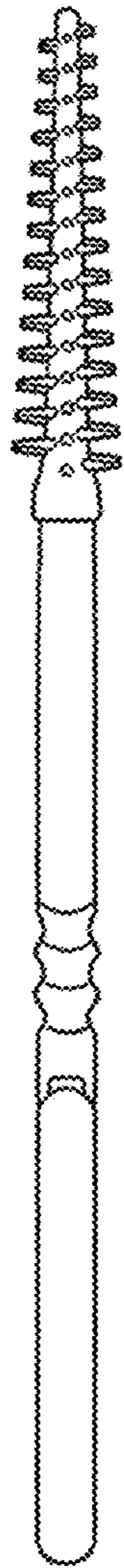
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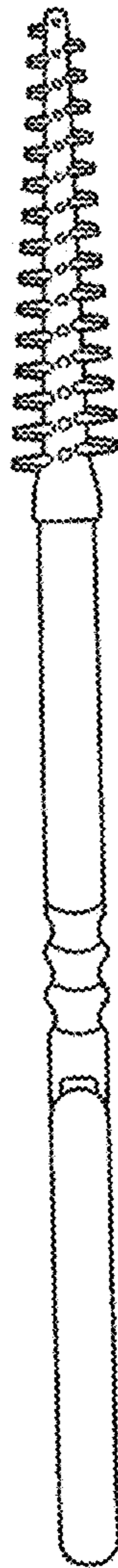
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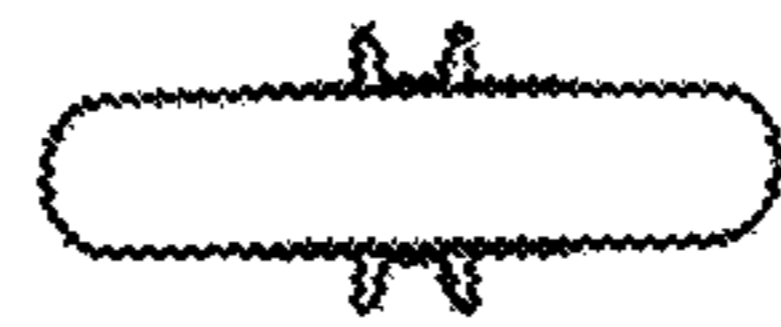
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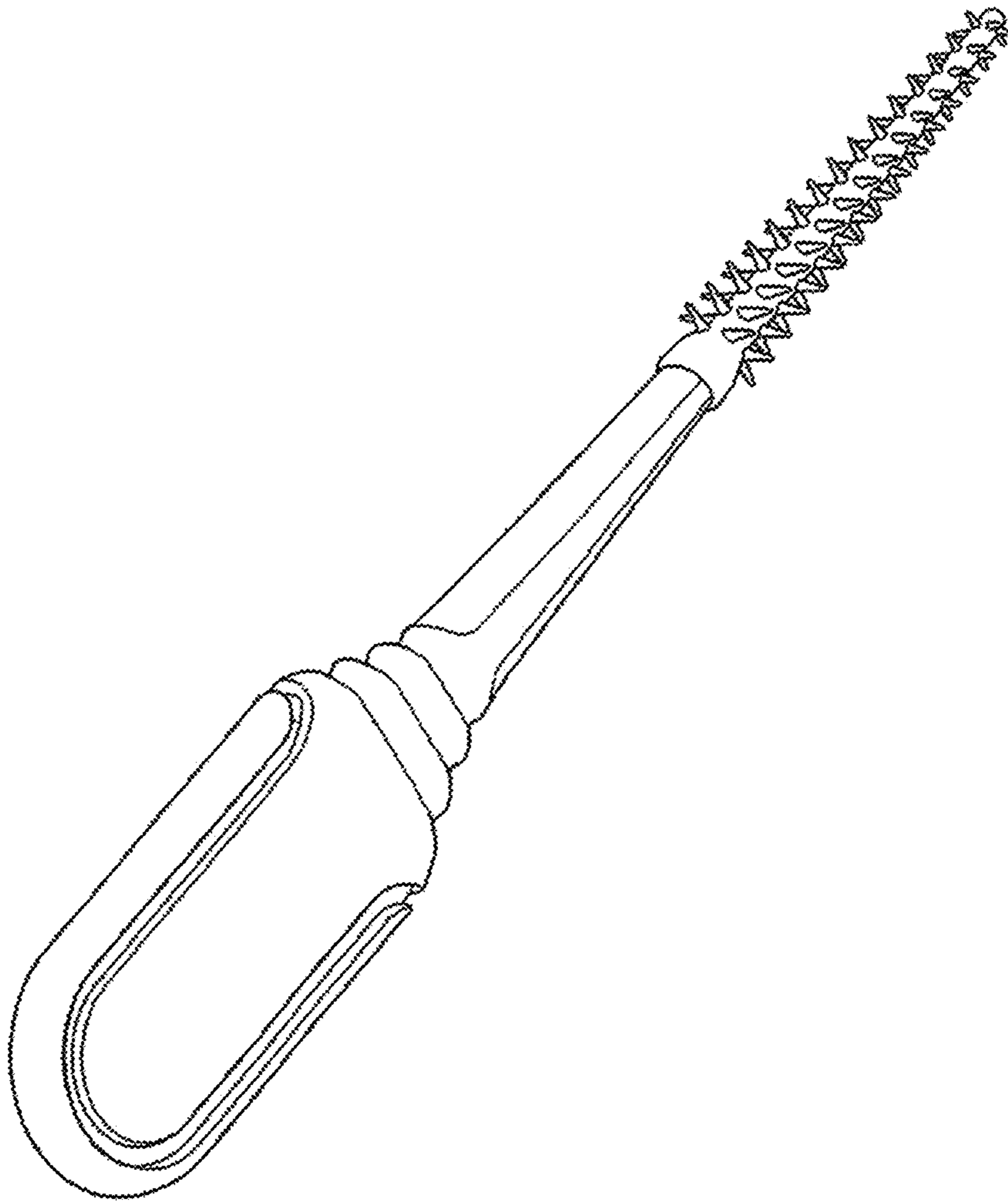
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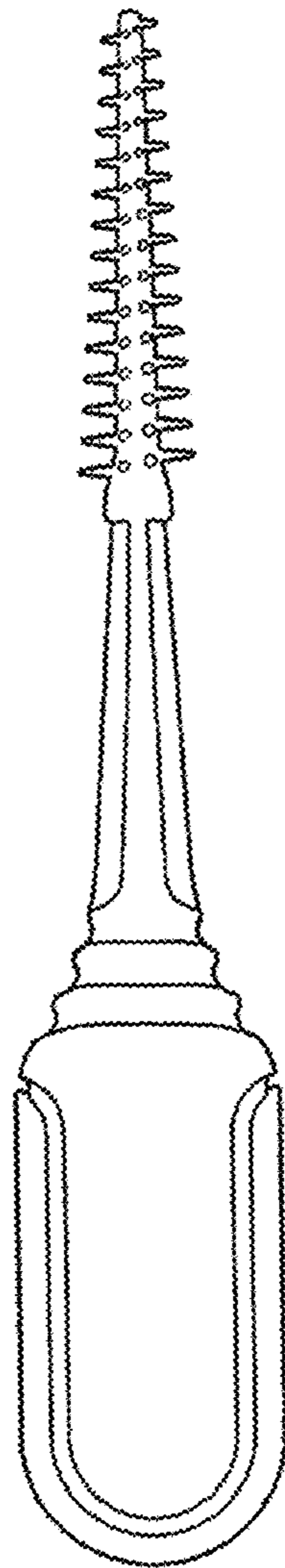
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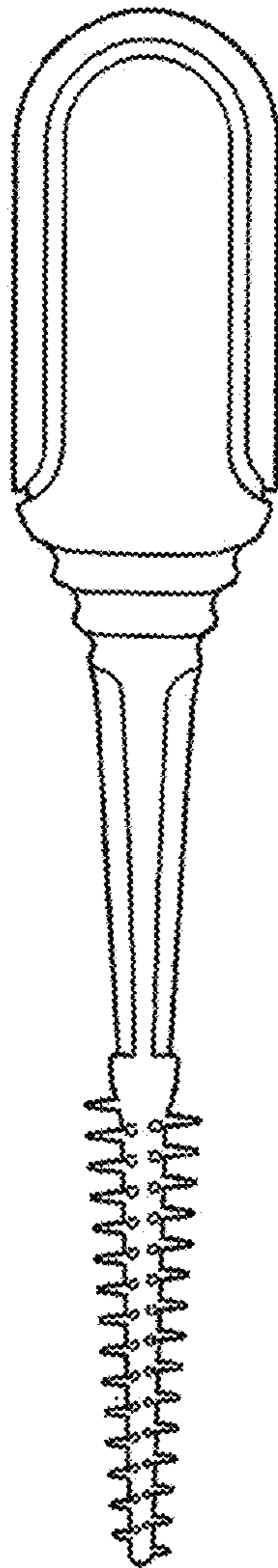
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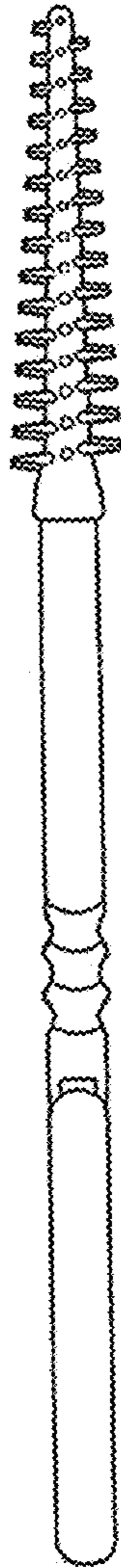
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2.4



2.5



2.6



2.7

